WHAT IS CLAIMED IS:

1.   A cache storage system connected to a client and at least one storage device through a network, comprising:

 a controller; and

 a device;

 wherein said controller controls said device to temporarily store block data which are exchanged between said client and said at least one storage device through said network and which designate a logical address on a storage medium and a data length.

2.   A cache storage system according to claim 1, wherein said controller locks an area of said device in said cache storage system designated by a write request when said client issues said write request to said cache storage system.

3.   A cache storage system according to claim 1, wherein said controller locks an area of said device in said cache storage system designated by a write request and locks an area in said storage device corresponding to said area in said cache storage system when said client issues said write request to said cache storage system.

4.   A cache storage system according to claim 3, wherein said controller judges, on the basis of a lock management table indicating lock status, whether said lock is required or not.

5.   A cache storage system according to claim 4,

wherein said lock management table at least contains indices for identifying areas of said device in said cache storage system, flags for indicating said lock status of areas of said device in said cache storage system, and flags for indicating said lock status of areas in said storage device corresponding to said areas of said device in said cache storage system.

6.   A cache storage system according to claim 3, wherein said controller issues permission of a request of said lock received from said client to said client and invalidates said request of said lock when there is no response/confirmation to said permission after issuing of said permission.

7.   A cache storage system according to claim 3, wherein said controller issues a write request to an area in said storage device corresponding to said area of said device in said cache storage system to write contents of said area of said device in said cache storage system when said client issues no request to process said area of said device in said cache storage system.

8.   A cache storage system according to claim 7, wherein said controller includes an address correspondence table for indicating correspondence of areas in said cache storage system with areas in said storage device.

9.   A cache storage system according to claim 7, wherein said controller encrypts data when said

controller sends said data to said storage device.

10. A cache storage system according to claim 3, wherein said controller issues a request to said storage device to unlock said locked area in said storage device when there is no request from said client for a predetermined time.

11. A cache storage system according to claim 1, wherein said controller locks an area of said device in said cache storage system to give access permission to the client at a point of time when said controller gives communication permission to said client by authenticating said client.

12. A cache storage system according to claim 1, wherein said controller locks an area of said device in said cache storage system to give access permission to the client and locks an area in said storage device corresponding to said area of said device in said cache storage system at a point of time when said controller gives communication permission to said client by authenticating said client.

13. A cache storage system according to claim 11, wherein said controller issues a write request to an area in said storage device corresponding to said area of said device in said cache storage system to write contents of said area of said device in said cache storage system when said client does not process said area of said device in said cache storage system.

14. A cache storage system according to claim 13,

wherein said controller encrypts data when said controller sends said data to said storage device.

15.   A cache storage system according to claim 1, wherein upon reception of a read request from said client, said controller sends data to said client when said data is present on said cache storage system, and requests said storage device to send data and sends said data given from said storage device to said client when said data is absent on said cache storage system.

16.   A network storage system comprising:

a client;

at least one storage device for exchanging block data with said client, said block data designating a logical address on a storage medium and a data length;

a cache storage system;

a computer for managing information for identifying said storage device and said cache storage system;

a network for connecting said client, said at least one storage device, said cache storage system and said computer to one another; and

a proxy device connected to said network and disposed between said client and said cache storage system for acting as a substitute for said client,

wherein said proxy device acquires information for identifying said cache storage system from said computer, executes client's access to said at

least one storage device through said cache storage system in place of said client on the basis of said identifying information and sends a result of the execution to said client.